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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/839,041	04/19/2001	Michael D. Nelson	X-783 US	3626

24309 7590 10/12/2006

XILINX, INC
ATTN: LEGAL DEPARTMENT
2100 LOGIC DR
SAN JOSE, CA 95124

EXAMINER	
SHEIKH, ASFAND M	

ART UNIT	PAPER NUMBER
3627	

DATE MAILED: 10/12/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/839,041	NELSON, MICHAEL D.	
	Examiner	Art Unit	
	Asfand M. Sheikh	3627	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *30 June 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *11-23 and 43* is/are pending in the application.

4a) Of the above claim(s) *1-10 and 24-42* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *11-23 and 43* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 30-June-2006 has been entered.

Acknowledgements

Please note that the Examiner for the pending application has changed. The Examiner is now Asfand M. Sheikh. The Examiner would like to note that the Group Art Unit has not changed.

In responsive to the Remarks/Arguments received on 30-June-2006: Claims 11-23 and 43 are pending for examination. Claims1 has been amended. Claim 43 has been added. Claims 1-10 and 24-42 have been cancelled.

In light of the amendment, the Examiner establishes new grounds of rejection for claims 11-23 and 43.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claim 11, 22, and 43 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shepherd United States Patent 6,912,510 in view of Henson United States Patent 6,167,383 and Pirillo United States Patent 6,990,464.

As per claim 11, Shepherd discloses a plurality of customers wishing to buy integrated circuits by a vendor of the circuits (col. 2, lines 12-27).

Shepherd fails to explicitly disclose receiving a plurality of configurations, storing the plurality of configurations, the storing being performed by the vendor, pulling the specified volumes from inventory by the vendor in response to an order from a first customer of the plurality of customers, encrypting, by the vendor using an encryption system provided by the first customer, one of the plurality of configuration selected by the

first customer, whereby an encrypted configuration is generated; loading by the vendor, the encrypted configuration into the specified volumes of the ICs; loading by the vendor, a decryption program into the specified volumes of ICs, wherein the decryption program is provided by the first customer; and packing the programmed ICs, for shipment from the vendor to the first customer.

Henson discloses receiving a plurality of configurations (col. 4, lines 35-52), storing the plurality of configurations, the storing being performed by the vendor (col. 4, lines 37-52 and col. 5, lines 6-27; Examiner interprets a customized product/order would be stored into the database), pulling the specified volumes from inventory by the vendor in response to an order from a first customer of the plurality of customers (col. 4, lines 37-52 and col. 5, lines 6-27; Examiner interprets a customized product/order would need to be from inventory); one of the plurality of configurations selected by the first customer (col. 4, lines 37-52 and col. 5, lines 6-27)) and packing the shipment from the vendor to the first customer (col. 4, lines 37-52 and col. 5, lines 6-27; Examiner interprets a customized product/order would need to be packed for shipment).

The Examiner notes that teachings of Henson solve a similar problem thus are considered as analogous art.

It would have been obvious to one skilled in the art at the time the invention was made to modify the teachings of Shepherd to include receiving a plurality of configurations; storing the plurality of configurations, the storing being performed by the vendor; pulling the specified volumes from inventory by the vendor in response to an order from a first customer of the plurality of customers; and packing the shipment from the vendor to the first customer as taught by Henson. One of ordinary skill in the art would have been motivated to combine the teachings in order to provide web-based online store having a user interface for enabling a customer to order a customer configured item (col. 2, lines 61-65).

Shepherd and Henson both fail to explicitly disclose encrypting, by the vendor using an encryption system provided by the first customer, one of the plurality of configurations selected by the first customer, whereby an encrypted configuration is generated; loading by the vendor, the encrypted configuration into the specified volumes of the ICs; and loading by the vendor, a decryption program into the specified volumes of ICs, wherein the decryption program is provided by the first customer.

However Pirillo discloses encrypting, by the vendor using an encryption system provided by the first customer whereby an

encrypted configuration is generated (col. 4, lines 9-31; Examiner interprets key pair/private key to be the encryption system used to generate an encrypted configuration), loading by the vendor the encrypted configuration (col. 4, lines 9-31; Examiner interprets station encrypting to be loading the encrypted configuration); and loading by the vendor, a decryption program wherein the decryption program is provided by the first customer (col. 4, lines 9-31; Examiner interprets decrypts the data using the private key to be a decryption program loaded into the data which as been provided by a customer (e.g. private key)).

The Examiner notes that teachings of Pirillo solve a similar problem thus are considered as analogous art.

It would have been obvious to one skilled in the art at the time the invention was made to modify the teachings of Shepherd and Henson to include encrypting, by the vendor using an encryption system provided by the first customer whereby an encrypted configuration is generated, loading by the vendor the encrypted configuration; and loading by the vendor, a decryption program wherein the decryption program is provided by the first customer as taught by Pirillo. One of ordinary skill in the art would have been motivated to combine the teachings in order to provide an encrypted item that could only be decrypted be the

individual who holds access to the decryption key/algorithm/program.

As per claim 22, Shepherd fails to explicitly disclose wherein the selected configuration is developed by the customer.

However Henson discloses wherein the selected configuration is developed by the customer (col. 4, lines 35-52).

The Examiner notes that teachings of Henson solve a similar problem thus are considered as analogous art.

It would have been obvious to one skilled in the art at the time the invention was made to modify the teachings of Shepherd to include wherein the selected configuration is developed by the customer as taught by Henson. The motivation to combine is the same as claim 11, above.

As per claim 43, Shepherd fails to explicitly disclose for each of the specified volumes of ICs received by the first customer, storing by the first customer, a decryption key in a memory that is coupled to the ICs, wherein the memory and IC reside on a device and the memory is inaccessible for reading external to the device; and for each of the specified volumes of the ICs received by the first customer, executing the decryption program, wherein the decryption program reads the key,

decryption the encrypted configuration data into the decrypted configuration data, and initializes the IC with the decrypted configuration data.

Pirillo discloses for each of the specified volumes received by the first customer, storing by the first customer, a decryption key in a memory that is coupled, wherein the memory reside on a device and the memory is inaccessible for reading external to the device (col. 4, lines 9-31; Examiner interprets smart card and smart card reader to be coupled memory that is inaccessible for reading external to the device); and for each of the specified volumes received by the first customer, executing the decryption program, wherein the decryption program reads the key, decryption the encrypted configuration data into the decrypted configuration data, and initializes with the decrypted configuration data (col. 4, lines 9-31).

The Examiner notes that teachings of Pirillo solve a similar problem thus are considered as analogous art.

It would have been obvious to one skilled in the art at the time the invention was made to modify the teachings of Shepherd to include for each of the specified volumes received by the first customer, storing by the first customer, a decryption key in a memory that is coupled, wherein the memory reside on a device and the memory is inaccessible for reading external to

the device; and for each of the specified volumes received by the first customer, executing the decryption program, wherein the decryption program reads the key, decryption the encrypted configuration data into the decrypted configuration data, and initializes with the decrypted configuration data as taught by Pirillo. The motivation to combine is the same as claim 11, above.

4. Claims 12-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shepherd United States Patent 6,912,510 in view of Henson United States Patent 6,167,383 and Pirillo United States Patent 6,990,464 as applied to claim 11 above, and further in view of Clinton et al. United States Patent 5,949,719 (hereinafter Clinton).

As per claim 12, Shepherd, Henson, and Pirillo all fail to explicitly disclose attaching a memory device to the FPGAs; and programming the FPGAs using the selected configuration stored in the memory device.

Clinton discloses attaching a memory device to the FPGAs (col. 1, lines 47-64); Examiner interprets configuration data is transferred from an external memory device to be attaching a memory device to the FPGA); and programming the FPGAs using the

selected configuration stored in the memory device (col. 1, lines 47-64).

It would have been obvious to one skilled in the art at the time the invention was made to modify the teachings of Shepherd, Henson, and Pirillo to include attaching a memory device to the FPGAs; and programming the FPGAs using the selected configuration stored in the memory device as taught by Clinton. One of ordinary skill in the art would have been motivated to combine the teachings in order to provide an integrated circuit including an FPGA with a programmable memory array, which allows for implementing various configurations (col. 1, lines 65-67 and col. 2, lines 1-2).

As per claim 13 and 14, Shepherd, Henson, and Pirillo all fail to explicitly disclose programming the memory device while it is connected to the FPGA; and powering up the FPGA and the memory device in order that the memory device configures the FPGA.

Clinton discloses programming the memory device while it is connected to the FPGA (col. 18, lines 33-54; Examiner interprets enable programming data access regions... transferring configuration data into configuration memory of the FPGA to be programming the memory device while it is connected to the

FPGA); and powering up the FPGA and the memory device in order that the memory device configures the FPGA (col. 1, lines 47-64 and col. 33, lines 19; Examiner interprets electrically programmable and DC inputs to be using power in order that the memory device configures the FPGA).

It would have been obvious to one skilled in the art at the time the invention was made to modify the teachings of Shepherd, Henson, and Pirillo to include programming the memory device while it is connected to the FPGA; and powering up the FPGA and the memory device in order that the memory device configures the FPGA as taught by Clinton. The motivation to combine is the same as claim 13, above.

As per claim 15-17, Shepherd, Henson, and Pirillo wherein the memory device is selected from a group consisting of a programming read only memory (PROM), NAND flash, NOR flash, erasable PROM, and electrically erasable PROM.

Clinton discloses wherein the memory device is selected from a group consisting of a programming read only memory (PROM), NAND flash, NOR flash, erasable PROM, and electrically erasable PROM (col. 5, lines 1-47).

It would have been obvious to one skilled in the art at the time the invention was made to modify the teachings of Shepherd,

Henson, and Pirillo to include wherein the memory device is selected from a group consisting of a programming read only memory (PROM), NAND flash, NOR flash, erasable PROM, and electrically erasable PROM as taught by Clinton. The motivation to combine is the same as claim 13, above.

As per claim 18, Shepherd, Henson, and Pirillo all fail to explicitly disclose wherein the memory device is an anti-fuse.

However Clinton discloses wherein the memory device is anti-fuse (col. 1, lines 47-64).

It would have been obvious to one skilled in the art at the time the invention was made to modify the teachings of Shepherd, Henson, and Pirillo to include wherein the memory device is an anti-fuse as taught by Clinton. The motivation to combine is the same as claim 13, above.

5. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shepherd United States Patent 6,912,510 in view of Henson United States Patent 6,167,383 and Pirillo United States Patent 6,990,464 as applied to claim 11 above, and further in view of Giddings et al. United States Patent 5,949,719 (hereinafter Giddings).

As per claim 19, Shepherd, Henson, and Pirillo all fail to explicitly disclose further comprising testing the programmed ICs.

However Giddings discloses further comprising testing the programmed ICs (ABSTRACT).

It would have been obvious to one skilled in the art at the time the invention was made to modify the teachings of Shepherd, Henson, and Pirillo to include further comprising testing the programmed ICs as taught by Giddings. One of ordinary skill in the art would have been motivated to combine the teachings in order to verify that an item was in working order before packing the item for shipment to a customer.

6. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shepherd United States Patent 6,912,510 in view of Henson United States Patent 6,167,383 and Pirillo United States Patent 6,990,464 as applied to claim 11 above, and further in view of Park et al. United States Patent 6,225,818 (hereinafter Park).

As per claim 20, Shepherd, Henson, and Pirillo all fail to explicitly disclose further comprising the step of labeling the programmed ICs to reflect the selected configuration.

However Park discloses further comprising the step of labeling the programmed ICs to reflect the selected configuration (col. 1, lines 14-19).

It would have been obvious to one skilled in the art at the time the invention was made to modify the teachings of Shepherd, Henson, and Pirillo to include further comprising the step of labeling the programmed ICs to reflect the selected configuration as taught by Park. One of ordinary skill in the art would have been motivated to combine the teachings in order to properly identify the functions of the integrated circuit.

7. Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shepherd United States Patent 6,912,510 in view of Henson United States Patent 6,167,383; Pirillo United States Patent 6,990,464; and Park et al. United States Patent 6,225,818 (hereinafter Park) as applied to 20 above, and further in view of Asar United States Patent 6,434,264 (hereinafter Asar).

As per claim 23, Shepherd, Henson, Pirillo, and Park all fail to explicitly wherein the step of labeling comprises parking the customers programmed ICs with at least one of a customer name and a customer logo.

However Asar discloses wherein the step of labeling comprises parking the customers programmed ICs with at least one of a customer name and a customer logo (col. 4, lines 66-67).

It would have been obvious to one skilled in the art at the time the invention was made to modify the teachings of Shepherd, Henson, Pirillo, and Park to include wherein the step of labeling comprises parking the customers programmed ICs with at least one of a customer name and a customer logo as taught by Asar. One of ordinary skill in the art would have been motivated to combine the teachings in order to properly identify the owner or company of the integrated circuit.

Response to Arguments

8. Applicant's arguments with respect to claims 11-23 and 43 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Asfand M. Sheikh whose telephone number is (571) 272-1466. The examiner can normally be reached on M-F 8a-4:30p.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Alexander G. Kalinowski can be reached on (571) 272-6771. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at (866) 217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call (800) 786-9199 (IN USA OR CANADA) or (571) 272-1000.

Asfand M Sheikh
Examiner
Art Unit 3627

ams
3-Oct-06

ALEXANDER KALINOWSKI
SUPERVISORY PATENT EXAMINER